

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A frame transfer method comprising:

a first step of determining whether or not the received frame is to be monitored based on a destination address in header information of the received frame, and generating, from the received frame, a single dual-purpose normally-transferred and monitored frame including the destination address and in-device information when the received frame is found to be monitored,

a second step of multicasting the dual-purpose frame to generate two frames,

a third step of editing one of the two frames to generate a monitored frame including the in-device information without the destination address and editing the other of the two frames to generate a normally-transferred frame including the destination address without the in-device information, and

a fourth step of establishing a path corresponding to each of the two frames

~~a first step of generating, from a received frame, a monitored frame having unique in-device information and a normally-transferred frame; and~~

~~a second step of establishing a path corresponding to each of the generated frames~~

~~wherein the first step includes,~~

~~a third step of determining whether or not the received frame is to be monitored and of generating, from the received frame, a dual-purpose normally-transferred and monitored frame, determining whether or not the received frame is to be monitored, and generating the dual-purpose frame in which predetermined header information is substituted for header information of the received frame when determining that the received frame is to be monitored, and~~

a fourth step of generating, from the dual-purpose frame, the monitored frame and the normally-transferred frame, multicasting the dual-purpose frame to be outputted by editing header information of one of the multicast frames for normal transferring and header information of the other frame for monitoring, and editing both of the multicast frames with header information respectively corresponding thereto for the second step.

2-3. (Cancelled).

4. (Currently Amended) The frame transfer method as claimed in claim 1 wherein the ~~predetermined~~ header information of the dual-purpose frame includes a monitored ID as well as information necessary for restoring a normally-transferred ID and information used for monitoring, and

~~the fourth step includes steps of:~~
~~generating upon the multicasting the~~ two frames, ~~in which~~ the monitored ID of the dual-purpose frame is respectively rewritten into an original flag and a monitored flag ~~upon the multicasting~~, and

upon further generating the normally-transferred frame and the monitored frame respectively, the header information of the frame having the original flag is by restoring restored to the a normally-transferred ID ~~for header information of the frame having the original flag~~ and ~~rewriting the~~ header information of the frame having the monitored flag is rewritten into a CPU-transferred ID.

5. (Cancelled)

6. (Currently Amended) A frame transfer apparatus comprising:

~~a frame processor for generating, from a received frame, a monitored frame having unique in-device information and a normally-transferred frame,~~

~~the frame processor includes,~~

~~a network processor for determining whether or not the received frame is to be monitored based on a destination address in header information of the received frame, and for generating, from the received frame, a single dual-purpose normally-transferred and monitored frame including the destination address and in-device information when the received frame is found to be monitored, and~~

~~a local switch for generating in cooperation with the network processor, from the dual-purpose frame, the monitored frame and the normally-transferred frame to be transmitted to the switch portion multicasting the dual-purpose frame to generate two frames,~~

~~wherein the network processor determines whether or not the received frame is to be monitored, and generates the dual-purpose frame in which predetermined header information is substituted for header information of the received frame when determining that the received frame is to be monitored editing one of the two frames to generate a monitored frame having unique in-device information without the destination address and editing the other of the two frames for a normally-transferred frame including the destination address without the in-device information, and~~

~~the local switch multicasts the dual-purpose frame to be outputted to the network processor by editing header information of one of the multicast frames for normal transferring and header information of the other frame for monitoring, and the network processor edits both~~

~~of the frames with header information respectively corresponding thereto to be transmitted to the switch portion; and~~

~~a switch portion for establishing a path corresponding to each of the generated two frames by inputting the frames.~~

7-8. (Cancelled)

9. (Currently Amended) The frame transfer apparatus as claimed in claim 6 wherein the ~~predetermined~~ header information of the dual-purpose frame includes a monitored ID as well as information necessary for restoring a normally-transferred ID and information used for monitoring, ~~and~~

~~the local switch generates, upon the multicasting, the two frames in which having the monitored ID of the dual-purpose frame is respectively rewritten into an original flag and a monitored flag upon the multicasting, and~~

~~the network processor generates, upon generating, the normally-transferred frame and the monitored frame respectively by restoring restores the header information of the frame having the original flag to the a normally-transferred ID for header information of the frame having the original flag and rewriting rewrites the header information of the frame having the monitored flag into a CPU-transferred ID.~~

10. (Cancelled)